DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017507 Address: 333 Burma Road **Date Inspected:** 26-Sep-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 1900 **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW tack welding of weld joints BK004A6-002-068, BK004A6-002-069 located on PCMK BK004A6-002, angled flange plate to stiffener plate. Welder was identified as 202319. QC was identified as ZPMC CWI Yu Dong Ping (QC1). Welding variables recorded by QC1 appeared to comply with WPS-B-P-2114.

SMAW welding of weld joints ND1-BRSA5-2-10A, ND1-BRSA5-2-14A located on PCMK ND1-BRSA5-2. Welders were identified, respectively, as 044541, 054460. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-B-T-3213-TC-U4b. See photo below.

SMAW repair welding of weld joint WSD1-TL5-4F-F-8A located on PCMK west tower, lift 5, internal connection plates. Welder was identified as 066261. QC was identified as ZPMC CWI Qiu Wen (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Mao Bin Bin (QCA2), who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on ZPMC Weld Repair Report T-WR3651 attached to ZPMC Ultrasonic Testing Report T787-UT-3249 as presented to this QA Inspector and verbalized by QCA2.

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SMAW repair welding of weld joint ESD1-TL5-2E-F-8A located on PCMK east tower, lift 5, internal connection plates. Welder was identified as 040610. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on ZPMC Weld Repair Report T-WR3651 attached to ZPMC Ultrasonic Testing Report T787-UT-3249 as presented to this QA Inspector and verbalized by QCA2.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW repair welding of weld joint NSD1-TL5-3E-F-15B located on PCMK north tower, lift 5, internal connection plates. Welder was identified as 0562000. QC was identified as QC2. Welding variables recorded by QC2 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on ZPMC Weld Repair Report T-WR3668 attached to ZPMC Ultrasonic Testing Report T787-UT-3248 as presented to this QA Inspector and verbalized by QC2.

SMAW repair welding of weld joint NSD1-TL5-3E-F-16B located on PCMK north tower, lift 5, internal connection plates. Welder was identified as 057200. QC was identified as QC2. Welding variables recorded by QC2 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on ZPMC Weld Repair Report T-WR3670 attached to ZPMC Ultrasonic Testing Report T787-UT-3248 as presented to this QA Inspector and verbalized by QC2.

Heavy Dock

This QA Inspector randomly observed the following on the Heavy Dock:

No apparent work was being performed on the Heavy Dock. All 4 towers' lift 3 were connected and positioned vertically on a base pedestal at end of the Heavy Dock. East, south, west, and north towers, lift 4 were positioned on top of east, south, west, and north towers, lift 3, respectively, on the Heavy Dock. The ZPMC 4000 ton and 1300 ton floating cranes were moored at or near the end of the Heavy Dock and sitting idle.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer